

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017752**Date Inspected:** 04-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Hua Jie**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder( OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

OBG TRIAL ASSEMBLY YARD

**WELDING:****Segment 11AE~11BE**

This QA Inspector observed ZPMC qualified welding personnel identified as 040504 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE11B-002; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate Transverse CJP Weld. The Welding Repair Report (WRR) was B-WR16567.ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached Photo for further details.

**Segment 11AE~11BE**

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE11B-008; located On Orthotropic Box Girder (OBG) Bottom Plate

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to Bottom Plate Transverse CJP Weld. The Welding Repair Report (WRR) was B-WR16518.ZPMC QC is identified as Mr.Zhu Yuan Yuan. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with applicable WPS-345-SMAW-1G (1F) FCM-Repair-1. See attached Photo for further details.

### Segment # 11CW ~ 11DW

This QA Inspector observed ZPMC qualified welding personnel identified as 053486 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG071C-043; located On Orthotropic Box Girder (OBG) Longitudinal Diaphragm to Floor Beam CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Yuan Yuan. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-TC-U4b-FCM-1.

### Segment # 11CE ~ 11DE

This QA Inspector observed ZPMC qualified welding personnel identified as 040484 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP382-001-033; located On Orthotropic Box Girder (OBG) Side Plate T-Rib Hold Back Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Shi Lei. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2112-FCM-1.

### Segment # 11CW ~ 11DW

This QA Inspector observed ZPMC qualified welding personnel identified as 040484 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP382-001-033; located On Orthotropic Box Girder (OBG) Corner Assembly I-Rib to I-Rib CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhu Yuan Yuan. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-3213-B-U3b.

NDT:

### Segment # 12BW

This QA Inspector performed Magnetic Particle Testing (MPT) Verification inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Orthotropic Box Girder (OBG) Components. The weld designations verified are as follows.

CA3012-199, 200.

CA3012-197, 198.

Nondestructive testing (NDT) notification No. 07223

### Segment # 11BE

This QA Inspector performed Magnetic Particle Testing (MPT) Verification inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Orthotropic Box Girder (OBG) Components. The weld

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## WELDING INSPECTION REPORT

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designations verified are as follows.

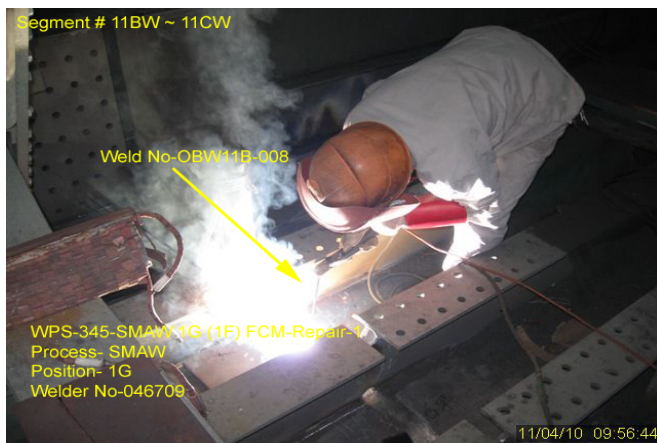
BP187-001-037, 038, 039, 040

BP079-001-037, 038, 039, 040

BP133-001-037, 038, 039, 040

Nondestructive testing (NDT) notification No. 07229

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



### Summary of Conversations:

no significant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhune,Manoj
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art
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QA Reviewer
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